

George B. Shure - 76 South Street - Brookline, Mass. 02467 - 617+469-0657

TO: Brookline Zoning Board of Appeals

DATE: February 09, 2014

SUBJECT: "Stantec Stormwater Report"

COPY

I have been asked, along with others, to peruse this report with the intent of explaining it and making sense of it. This aspect of the proposed 40B project would be best addressed by civil engineers with some hydrological background and I understand that we have an excellently qualified civil who has also looked at this report. He also has the advantage of being an immediate abutter to the proposed Hancock Village travesty. My own background is in geology/petrology and in physics.

I find that:

- A) This report is some 360 pages in length and yet it has no signatory. This is preposterous. An anonymous gift to a charity is admirable but anonymity of authorship is unadmirable. An anonym has zero credibility and should be dismissed as such along with this fictitious report. Only the first 53 pages are numbered. The remaining pages are not numbered or otherwise capable of being easily referenced. This would seem to be intentional obfuscation.
- B) This report combines, with breath-taking cleverness, three areas of all-consuming boredom: fiction, flat-out lies, and plagiarism. There is nothing even remotely factual or scientific about this report. The scientific term for this report is gobbledygook and it leaves one empathetic with a judge in a paint-drying contest.
- C) The conjunctive word "if" and the verb "assume" are used profusely throughout this report. If these words were used sparingly but incorrectly on a master's thesis or a Ph.D. dissertation, one would be told to re-think their choice of profession. This report does not meet standards of theory much less hypothesis. The term "theory" has several definitions. One of them refers to a set of principles that govern or describe and explain a body of facts. For example, consider the subject of music. When one is a serious music student, one studies music theory. The term "theory" is often confused with the term "hypothesis". In science, however, the meanings are different. One starts with a hypothesis. When it is confirmed through observations or evidence or experiments, and generally accepted by scientists to be true - it then becomes theory. This is the meaning that applies, for example, to the theory of evolution which is a broad subject but not a single fact. This report is neither a broad subject nor a single fact.
- D) Of no surprise is CHR's intentional omission of a very significant amount of drilling, blasting, and hydraulic hammering into a serious layer of conglomerate (in this portion of North America it is known as pudding-stone or Roxbury Conglomerate) and much of our area, less the layers of top soil, would show this formation to be ubiquitous. In fact, the West Roxbury Stone Quarry off Centre Street in West Roxbury is the same formation which is under Brookline. When blasting takes place in West Roxbury, I can feel the blasting tremors while standing atop the exposed conglomerate on my property. If I can feel it, my foundation can feel it. If my

foundation can feel it, my house can feel it. The abutters on Beverly Road and Russett Road may have to consider preparatory measures to deal with significant property damage.

The structural damage may be less significant than the water issue. Every time a new seam, i.e. fissure, is opened in blasting conglomerate the water release is enormous. My own puddingstone oozes water every month of the year. If we drill or blast, it will flow. Multi-cylinder pumps have to be employed in some quarries 24 hours a day. When the sump pumps stop, a quarry four hundred feet deep can become a very deep lake very quickly. Locations in Quincy, Hingham, Lynn, Weston and many other towns can confirm this. If this project is allowed to reach a drilling and blasting stage, the green belts and the abutting neighborhood could take on the appearance of the Lake Dwellers of pre-historic Switzerland.

- E) On page 1 bottom paragraph "the proposed buildings, parking areas, and walkways will increase the amount of impervious area on the site". Impervious means impossible to penetrate. With this one sentence, Stantec has made a prima facie case for not proceeding with this project. If CHR and Mass Development are allowed to proceed, then P.T. Barnum is reaffirmed: "There's a sucker every minute." In this case that sucker would be our legal system.
- F) Again page 1 same paragraph "the project has been designed to incorporate porous pavement and subsurface detention/infiltration basins to mitigate the rate of runoff from the site, reducing flow rates to below pre-development rates". This sentence rises to the level of verbal alchemy and reaffirms a prima facie case for not proceeding.
- G) On page 3 "the project is in full compliance with all of the Stormwater Management Standards". Stantec is hoping to convince all concerned parties that there exists little if any water problem; nonetheless, these are the steps that they will take to mitigate a problem that doesn't exist. Stantec is also hoping that readers will say that this report is so technical that it must be correct so let's approve it. My simplistic thought process is telling me that if they need to design this Barney Rubble/Fred Flintstone system, then they are admitting to the creation of a problem that cannot be managed - it can only be significantly worsened.
- H) Page 5 "Key Features of Low Impact Development Stormwater Management Systems include implementing ~~practices~~ practices to maintain a site's existing hydrology". You cannot both maintain a site's existing hydrology and at the same time alter it; this project will create many other water issues in addition to stormwater such as overwhelming and overstraining the Hoar Sanctuary.
- I) Page 7 "The project does not have direct discharge of stormwater to waters or wetland. Standard 1 is therefore met." How about indirect discharge as well? This declaration is sheer arrogance and Stantec could not know this unless or until it happens or doesn't happen.
- J) Page 9 "Post-development peak discharge rates do not exceed pre-development peak discharge rates. Standard 2 is met". This is not true - it is a complete unknown. Independent sources would have to do their own borings to verify any of this.

- K) Page 11 "For the purpose of hydrograph routing in porous pavement areas and at stormwater detention/infiltration basins, no infiltration rate was included in the calculations. This is a conservative assumption." These two sentences defy all logic and common sense.
- L) Several references are made to connections to existing drain pipes. Many of these pipes cross other properties and at least one crosses both Brookline and Boston.
- M) Several references are made to detention basins. To offset the potential water issues these basins would have to have the capacity of Hammond Pond or the Brookline Reservoir.
- N) Page 29 "The basins are sized to be in excess of what would be the required recharge if the site was comprised of suitable soils." This means that the site is not comprised of suitable soils.
- O) The remaining pages address sediment, pollutants, long term maintenance, and illicit discharge. The supporting numbers appear to be complete fabrication.

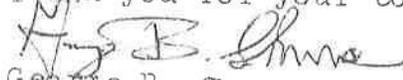
In summation:

Individually and collectively these proposals border on the nonunderstandable and the unsubstantiated..I do not know if Mass Development has this report or has read it. It seems to me that they do not grasp the magnitude of the problems that exist on this site and that they do not grasp the magnitude of how much worse the problems will become. They may not care. I do not know this either.

* What I do know is that this is a proposal to build on land with serious water problems. John Hancock Insurance and Olmstead Associates understood this reality when they laid out the location of the presently existing town houses by relying on the expertise of a surveying family that knew the below ground topography as well as the above ground topography. The remaining open areas were considered unsuitable for building.

In being asked to make sense of this report it becomes clear that you cannot make sense out of nonsense. That would be tantamount to disproving a negative. I think that computer programmers of the late 1950's and 1960's had the relevant expression: "garbage in, garbage out". A drilling and boring, spent time on this property and almost certainly revealed information that has not been made available to the town and probably not to Mass Development. The report we have is completely made up material.

Thank you for your consideration.


George B. Shure